# California Regional Water Quality Control Board Santa Ana Region

November 16, 2005

ITEM: 3

SUBJECT: Goodrich Corporation, Rialto

#### **DISCUSSION:**

The matter before the Board is whether to adopt Resolution No. R8-2005-0120 (the Resolution) and Remedial Investigation Order by Consent No. R8-2005-0121 (the Order) for Goodrich Corporation (Goodrich). The Resolution would authorize the Executive Officer to execute an Administrative Settlement Agreement (the Agreement) with Goodrich, and the Order would require Goodrich to implement a work plan to investigate perchlorate and trichloroethylene (TCE) in groundwater in the Rialto area.

## Background

In 1957, B.F. Goodrich Corporation purchased a 160-acre property in north Rialto. The West Coast Loading Corporation (WCLC) formerly operated on this property from about 1952 to 1957. Goodrich performed solid propellant research and development for the United States Air Force at the site until Goodrich sold the property and vacated the site in 1964. Goodrich used ammonium perchlorate as an oxidizer in the manufacture of solid rocket propellants at the site. In August 2001, Board staff requested Goodrich to conduct a soil and groundwater investigation at the site. Goodrich submitted a limited groundwater investigation work plan in May 2002. In June 2002, the Executive Officer issued Cleanup and Abatement Order (CAO) No. R8-2002-0051 to Goodrich and Kwikset Corporation. The CAO required Goodrich and Kwikset to submit a proposal with a one-year implementation schedule to define the extent of perchlorate in soil and groundwater.

At a September 2002 public hearing, the Regional Board rescinded the CAO after Goodrich provided assurance that Goodrich would cooperate with Board staff and local water purveyors to address the perchlorate situation. The Board also directed staff to issue investigation orders (pursuant to Water Code Section 13267) to all suspected dischargers and to work with suspected dischargers to find solutions to the water supply crisis in the area. Subsequent to the Board's decision, staff issued investigation orders to Goodrich and numerous other parties. Goodrich and the four water purveyors also began negotiations and reached an agreement to help solve the purveyors' water supply problems. The agreement stated that Goodrich would pay \$4 million to the water purveyors to fund wellhead treatment projects to remove perchlorate, and the purveyors would forebear from filing suit against Goodrich for a period of two years. The agreement was also conditioned on the execution of a separate agreement between Goodrich and the Board. The Board adopted a resolution on January 17, 2003,

approving such an agreement, and the Executive Officer subsequently executed an agreement with Goodrich specifying that in consideration for Goodrich providing \$4 million to fund wellhead treatment projects, the Board would not require Goodrich to conduct investigation or cleanup of perchlorate contamination for a period of two years.

Both agreements expired on December 31, 2004, and all parties complied with the agreements. However, in July 2003 the United States Environmental Protection Agency (USEPA) issued an Administrative Order to Goodrich requiring a Remedial Investigation of the site. From May 2004 through January 2005, Goodrich conducted a Remedial Investigation that consisted of an on-site soil gas survey and soil investigation, and the installation of four groundwater monitoring wells and three piezometers at, and along the boundary of, the site. Perchlorate and trichloroethylene were found in groundwater at the site. Goodrich is continuing to perform monthly groundwater level monitoring and quarterly groundwater quality sampling, as required by USEPA's order.

In December 2004, Goodrich and Board staff met with USEPA to discuss how to proceed with additional investigation work in follow up to the work Goodrich had conducted pursuant to USEPA's order. Goodrich and Board staff agreed that it would be appropriate for the Board to oversee any additional work by Goodrich, given Board staff's role in overseeing ongoing investigations being conducted by other parties. In February 2005, USEPA agreed to allow the Board to oversee additional work by Goodrich.

## The Need for the Agreement and the Order

Subsequent to USEPA's decision, Goodrich proposed that Board staff negotiate a settlement agreement and consent order as a mechanism for requiring Goodrich to conduct additional investigation. Goodrich's interest in conducting work under such an agreement and consent order relates to their efforts to recover costs from other responsible parties. Goodrich has filed a lawsuit in federal court against other responsible parties, seeking reimbursement for some of its costs to conduct these investigations. Based on recent court decisions, Goodrich believes that a settlement agreement and order from the appropriate regulatory agency are necessary to preserve its legal ability to seek recovery under federal laws from other responsible parties.

Board staff believes that additional groundwater investigation of the extent of perchlorate and TCE is necessary, and that an agreement and consent order provide a means to accomplish that work more expeditiously than through a conventional enforcement mechanism (such as a cleanup and abatement order). This would also allow Board staff resources to be used more efficiently and allow staff to focus efforts on other recalcitrant parties that have contributed to perchlorate problems in the Rialto area. In addition, staff believes it is appropriate not to interfere with Goodrich's efforts to recover costs, and to allow those issues to be resolved in federal court. This is particularly true, given that Goodrich's efforts could increase the pressure on other responsible parties to participate in future investigation and remediation of the perchlorate pollution.

## Summary of the Agreement, Order and Resolution

Board staff and Goodrich have negotiated a proposed Administrative Settlement Agreement. Key provisions of the Agreement include:

- Goodrich would implement a groundwater investigation described in a draft work plan dated October 14, 2005 (the Work Plan). The Work Plan provides for the installation of five groundwater monitoring wells downgradient of the 160-acre site formerly occupied by Goodrich.
- The Executive Officer may, based on good cause, require Goodrich to install up to four additional wells. The Executive Officer's decision to require additional wells may be reviewed by the Board.
- Goodrich would be subject to penalties of \$100,000 for each 30-day period the final report on its investigation is late. The penalties would not apply to a revised deadline necessary to allow the installation of additional wells.
- Penalties may be waived due to delays beyond Goodrich's reasonable control.
  The Executive Officer's decision to impose penalties may be reviewed by the Board.
- The Board would rescind the investigation order issued to Goodrich in September 2002.
- For the duration of Goodrich's implementation of the Work Plan, the Board would not require Goodrich to conduct any additional investigation or cleanup of perchlorate or TCE in the Rialto area beyond that specified in the Agreement.

Remedial Investigation Order by Consent No. R8-2005-0121 would require Goodrich to implement the Work Plan, as approved by the Executive Officer, in accordance with the time schedule approved by the Executive Officer. The time schedule in the draft Work Plan indicates that a remedial investigation report documenting the findings of the investigation would be submitted 10 months after the Work Plan is approved. The Order would also rescind the investigation order issued to Goodrich in September 2002.

Resolution No. R8-2005-0120 would authorize the Executive Officer to execute the Agreement on behalf of the Board. The Resolution would also direct Board staff to provide status reports to the Board at each of its meetings on the progress of Goodrich's investigation. In addition, the Resolution would direct Board staff to prepare draft cleanup and abatement orders, including replacement water requirements, directed to all appropriate parties, for Board consideration at its first meeting after Goodrich's completion of work required by the Agreement.

#### Alternatives and Rationale

Board staff has identified the following alternatives to proceeding with the Agreement and Order that the Board could consider:

- 1. Approve the Agreement and Order in a revised form.
- 2. Do not approve the Agreement and Order and direct staff to prepare a cleanup and abatement order for Goodrich.
- 3. Do not approve the Agreement and Order and take no action at this time.

Board staff believes that Alternative #3 is unacceptable and would not result in any immediate action by Goodrich to address the groundwater plume. Alternative #1 could be considered if comments from interested parties suggest that revisions to the Agreement and Order should be made to improve those documents. If changes to the Agreement and Order were unacceptable to Goodrich, the Board could implement Alternative #2.

Alternative #2 represents a significantly different approach. Some interested parties have suggested that Alternative #2 is the most appropriate approach because a cleanup and abatement order could include requirements for Goodrich to provide replacement water immediately. Board staff agrees that replacement water is a critical component of the solution to the perchlorate problem in the Rialto area. It is appropriate, however, to implement replacement water requirements in a manner that supports cleanup and effective management of the groundwater basin. Board staff believes that there is no immediate need to require replacement water, and that the investigation required by the Agreement and Order would allow future replacement water solutions to be more effective. The rationale for this position is discussed more fully below.

There are three primary reasons for requiring dischargers to provide replacement water: 1) Replacement water is needed to ensure an adequate supply of high-quality drinking water; 2) Replacement water is needed to eliminate costs for treatment of water supplies that ratepayers would otherwise have to absorb; and 3) Replacement water requirements can be implemented as a component of a groundwater cleanup plan.

Factor 1 is not currently an issue for water purveyors in the Rialto area. All of these purveyors have shut down all wells that contain perchlorate at over 4 parts per billion (ppb). Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) has established a Public Health Goal (PHG) for perchlorate at 6 ppb. The PHG is the level of perchlorate in drinking water that does not cause or contribute to adverse health effects. Since the purveyors have shut down wells before they even reach the PHG, the water supplied to residents in the Rialto area is of high quality and does not exceed or approach the PHG.

Factor 2, however, is an issue for the purveyors because they are operating treatment systems to remove perchlorate from some of their affected wells. While they have received funding (including the \$4 million provided by the 2003 Goodrich agreement) to offset some of the costs of these systems, they do not have external funding to continue to pay for the ongoing operation of these systems. It is appropriate to include these costs in water replacement requirements, and to require reimbursement of previously-incurred treatment costs. It is staff's intent to include such requirements, including reimbursement of past costs, in future cleanup and abatement orders that address water replacement.

A water replacement plan consistent with Factor 3 (e.g., installing wellhead treatment systems on existing water supply wells) cannot be implemented at this time due to a lack of characterization of the extent of perchlorate in groundwater in the area. More

data on the lateral and vertical distribution of perchlorate in the basin are needed to evaluate the effects of pumping existing water supply wells. The investigation required by the Agreement and Order is a necessary step to help fill this data gap. Therefore, since water supply quality is not currently a problem and reimbursement of costs can be addressed in future orders, Board staff believes that it is appropriate for Goodrich to conduct additional investigation of perchlorate in groundwater before requiring replacement water to be provided. This would allow replacement water to be provided in a manner that contributes to cleanup of the basin. As discussed above, the Resolution would direct staff to develop cleanup and abatement orders including replacement water requirements and to schedule those orders for Board consideration immediately after the completion of Goodrich's proposed investigation.

## Recommendation

Adopt Resolution No. R8-2005-0120 and Remedial Investigation Order by Consent No. R8-2005-0121 as proposed.